



**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 60 and 63**

**[EPA-HQ-OAR-2010-0682; FRL-9948-92-OAR]**

**RIN 2016-AS83**

**National Emission Standards for Hazardous Air Pollutant**

**Emissions: Petroleum Refinery Sector Amendments**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This action amends the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Petroleum Refineries in three respects. First, this action adjusts the compliance date for regulatory requirements that apply at maintenance vents during periods of startup, shutdown, maintenance or inspection for sources constructed or reconstructed on or before June 30, 2014. Second, this action amends the compliance dates for the regulatory requirements that apply during startup, shutdown, or hot standby for fluid catalytic cracking units (FCCU) and startup and shutdown for sulfur recovery units (SRU) constructed or reconstructed on or before June 30, 2014. Finally, this action finalizes technical corrections and clarifications to the NESHAP and the New Source Performance Standards (NSPS) for Petroleum Refineries. These amendments are being finalized in response to new information submitted after these regulatory

requirements were promulgated as part of the residual risk and technology review (RTR) rulemaking, which was published on December 1, 2015. This action will have an insignificant effect on emissions reductions and costs.

**DATES:** This final rule is effective on **[insert date of publication in the Federal Register]**.

**ADDRESSES:** The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2010-0682. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, e.g., confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Ms. Brenda Shine, Sector Policies and Programs Division, Refining and Chemicals Group (E143-01), Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, North Carolina, 27711; telephone number: (919) 541-3608; email address: [shine.brenda@epa.gov](mailto:shine.brenda@epa.gov).

**SUPPLEMENTARY INFORMATION:**

Preamble Acronyms and Abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

CAA	Clean Air Act
CBI	confidential business information
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CPMS	continuous parameter monitoring system
EPA	Environmental Protection Agency
ESP	electrostatic precipitator
FCCU	fluid catalytic cracking unit
HAP	hazardous air pollutants
LEL	lower explosive limit
NESHAP	national emissions standards for hazardous air pollutants
NSPS	new source performance standards
NTTAA	National Technology Transfer and Advancement Act
OAQPS	Office of Air Quality Planning and Standards
OMB	Office of Management and Budget
OSHA	Occupational Safety and Health Administration
PRA	Paperwork Reduction Act
PSM	Process Safety Management
QA	quality assurance
RFA	Regulatory Flexibility Act
RMP	Risk Management Plan
RSR	Refinery Sector Rule
RTR	residual risk and technology review
SRU	sulfur recovery unit
TTN	Technology Transfer Network
UMRA	Unfunded Mandates Reform Act

Organization of this Document. The information in this preamble is organized as follows:

**I. General Information**

- A. Does this action apply to me?
- B. Where can I get a copy of this document and other related information?
- C. Judicial Review and Administrative Reconsideration

## II. Background Information

### III. Final Revisions to Compliance Dates and Technical Corrections in the NSPS and NESHAP for Petroleum Refineries and Revisions on the February 9, 2016 Proposal

#### IV. Summary of Comments and Responses

- A. Compliance Date Amendments
- B. Technical and Editorial Corrections

#### V. Statutory and Executive Order Reviews

- A. Executive Orders 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review
- B. Paperwork Reduction Act (PRA)
- C. Regulatory Flexibility Act (RFA)
- D. Unfunded Mandates Reform Act (UMRA)
- E. Executive Order 13132: Federalism
- F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
- G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
- H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use
- I. National Technology Transfer and Advancement Act (NTTAA)
- J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- K. Congressional Review Act (CRA)

#### I. General Information

##### A. Does this action apply to me?

Regulated Entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

**Table 1. Industrial Source Categories Affected By This Final Action**

NESHAP and Source Category	NAICS <sup>a</sup> Code
Petroleum Refining Industry	324110

<sup>a</sup> North American Industry Classification System.

Table 1 of this preamble is not intended to be exhaustive,

but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source categories listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP or NSPS. If you have any questions regarding the applicability of any aspect of these NESHAP or NSPS, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final action will also be available on the Internet through the Technology Transfer Network (TTN) Web site, a forum for information and technology exchange in various areas of air pollution control. Following signature by the EPA Administrator, the EPA will post a copy of this final action at <http://www.epa.gov/ttn/atw/petref.html>. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same Web site.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by [**insert date 60 days after**

**date of publication in the Federal Register]**. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that "[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review." This section also provides a mechanism for the EPA to reconsider the rule "[i]f the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule." Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC North Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

## **II. Background Information**

The EPA promulgated NESHAP pursuant to the CAA sections 112(d)(2) and (3) for petroleum refineries located at major sources in three separate rules. These standards are also referred to as maximum achievable control technology (MACT) standards. The first rule was promulgated on August 18, 1995, in 40 CFR part 63, subpart CC (also referred to as Refinery MACT 1) and regulates miscellaneous process vents, storage vessels, wastewater, equipment leaks, gasoline loading racks, marine tank vessel loading, and heat exchange systems. The second rule was promulgated on April 11, 2002, in 40 CFR part 63, subpart UUU (also referred to as Refinery MACT 2) and regulates process vents on catalytic cracking units (CCU, including FCCU), catalytic reforming units, and SRU. Finally, on October 28, 2009, the EPA promulgated amendments to Refinery MACT 1 to include MACT standards for heat exchange systems, which were not originally addressed in Refinery MACT 1. This same rulemaking included updating cross-references to the General Provisions in 40 CFR part 63.

The EPA completed an RTR of Refinery MACT 1 and 2, publishing proposed amendments on June 30, 2014. These proposed amendments also included technical corrections and clarifications raised in a 2008 industry petition for

reconsideration of NSPS for Petroleum Refineries (40 CFR part 60, subpart Ja). After seeking, receiving and addressing public comments, the EPA published final amendments on December 1, 2015.

The December 1, 2015, final amendments included requirements in Refinery MACT 1 for process vents designated as "maintenance vents." Maintenance vents are those whose use is needed only during startup, shutdown, maintenance or inspection of equipment where the equipment is emptied, depressurized, degassed or placed into service. The December 1, 2015, final amendments require that the hydrocarbon content of the vapor in the equipment served by the maintenance vent to be less than or equal to 10 percent of the lower explosive limit (LEL) prior to venting to the atmosphere. The December 1, 2015, final rule also provides specific allowances for situations when the 10 percent LEL cannot be demonstrated or is technically infeasible. After promulgation of the rule, we learned that there was confusion regarding the interpretation of the dates provided in Table 11 of 40 CFR part 63, subpart CC. We intended the compliance date for maintenance vents located at sources constructed on or before June 30, 2014, to be the next qualifying maintenance activity occurring after February 1, 2016 (the effective date of the December 1, 2015, final amendments).



Additionally, the December 1, 2015, final amendments included alternative standards for startup and shutdown events for FCCU and SRU in Refinery MACT 2. For FCCU, the final amendments included two options for demonstrating compliance with the particulate matter (PM) limit (as a surrogate for metal hazardous air pollutants [HAP]) during periods of startup, shutdown, or hot standby in §63.1564(a)(5). These options are: meeting the emission limit(s) that apply during normal operations or meeting a minimum cyclone face velocity limit. Similarly, two options were provided for demonstrating compliance with the carbon monoxide (CO) limit for FCCU (as a surrogate for organic HAP) during periods of startup and shutdown in §63.1565(a)(5). These options include: meeting the emission limit(s) that apply during normal operations or meeting an excess oxygen limit in the exhaust from the catalyst regenerator. For SRU, three compliance options were provided to demonstrate compliance during periods of startup and shutdown in §63.1568(a)(4). These are: meeting the emission limit(s) that apply during normal operations, sending purge gases to a flare that meets certain operating requirements, or sending purge gases to a thermal oxidizer or incinerator that meets specific temperature and excess oxygen requirements. For owners or operators electing to comply with the alternative limits for startup, shutdown, or hot standby for FCCU (e.g., minimum

cyclone face velocity option for PM; excess oxygen limit for the catalyst regenerator exhaust for CO) or for startup or shutdown for SRU (e.g., sending purge gases to a thermal oxidizer or incinerator meeting temperature and excess oxygen requirements), the compliance date established in the final amendments was February 1, 2016 (the effective date of the December 1, 2015, RTR final amendments).

Since the promulgation of the December 1, 2015, final amendments, the EPA received new information that the compliance dates for the maintenance vents and alternative startup/shutdown standards for FCCU and SRU pose safety concerns. This information indicated that the compliance dates do not allow sufficient time to complete the management of change process including evaluating the change, forming an internal team to accomplish the change, engineering the change which could include developing new set points, installing new controls or alarms, conducting risk assessments, updating associated plans and procedures, providing training, performing pre-startup safety reviews, and implementing the change as required by other regulatory programs. Further, the information indicated that in some cases refinery owners or operators may need to install additional control equipment to meet the new requirements. On January 19, 2016, the EPA received a petition for reconsideration from the American Petroleum Institute (API) and

the American Fuel and Petrochemical Manufacturers (AFPM) formally requesting that EPA reconsider these issues.

On February 9, 2016, the EPA published proposed revisions to the December 1, 2015, final amendments. Specifically, the proposal included a revision to the compliance date in 40 CFR part 63 subpart CC for the requirements for maintenance vents which apply during periods of startup, shutdown, maintenance or inspection for sources constructed or reconstructed on or before June 30, 2014. The proposal also included a revision to the compliance dates in 40 CFR part 63 subpart UUU for the use of the alternative standards for FCCU and SRU which apply during startup and shutdown and for FCCU during hot standby for sources constructed or reconstructed on or before June 30, 2014. Finally, the proposed rule provided technical corrections and clarifications to the NESHAP and NSPS Ja.

The proposal provided a 45-day comment period ending on March 25, 2016. The EPA received comments on the proposed revisions from refiners, trade associations, a state environmental and health department, environmental groups, and private citizens. This final rule provides a discussion of the final revisions, including changes in response to comments on the February 9, 2016, proposal, as well as a summary of the significant comments received and responses. This action fully responds to the January 19, 2016, petition for reconsideration

submitted by API and AFPM.

**III. Final Revisions to Compliance Dates and Technical Corrections in the NSPS and NESHAP for Petroleum Refineries and Revisions on the February 9, 2016, Proposal**

In the February 9, 2016 proposal, we proposed to require owners and operators of sources that were constructed or reconstructed on or before June 30, 2014, to comply with the requirements for maintenance vents during startup, shutdown, maintenance and inspection; the requirements for FCCU during startup, shutdown and hot standby; and the requirements for SRU during startup and shutdown no later than 18 months after the effective date of the December 1, 2015, rule (i.e., no later than August 1, 2017). We are finalizing these amendments as proposed.

We also proposed to make clarifying revisions to Table 11 in 40 CFR part 63, subpart CC to more clearly delineate the compliance dates for the various provisions in subpart CC and to reflect the compliance date proposed for the maintenance vent provisions. We are finalizing these amendments as proposed with minor clarifications. Relative to the amendments made to Table 11 in subpart CC, we received a comment that the compliance dates for storage vessels in the proposed revisions to Table 11 do not reflect the use of the overlap provisions in §63.640(n). The overlap provisions in §63.640(n) allow Group 1 and 2 storage vessels to comply with other regulations (e.g., 40 CFR part 60,

subpart Kb) as a means of demonstrating compliance with the standards in Refinery MACT 1. Compliance with the overlap provisions is in lieu of complying with the storage vessel provisions in Refinery MACT 1. We acknowledge that Table 11 does not directly reference the overlap provisions included in §63.640(n). We are clarifying in Table 11 that owners or operators of affected storage vessels must transition to comply with the provisions in §63.660 "...or, if applicable, §63.640(n)..." on or before April 29, 2016.

We also proposed a number of technical and clarifying revisions to other portions of the regulations. These amendments are listed below and are being finalized as proposed with minor revision as noted in Items 3 and 9. Finally, we are making two additional revisions, as described following the numbered paragraphs below. One change is to correct an error we identified and the other is in response to a comment we received during the comment period.

1. Revising the first sentence in §60.102a(f)(1)(i) to incorporate the pollutant of concern, sulfur dioxide (SO<sub>2</sub>), directly into the regulatory text rather than inside a parenthesis within the sentence;
2. Making a grammatical correction to the closed blowdown system definition in §63.641 by adding an "a" before the phrase, "...process vessel to a control device or back into

the process.”;

3. Replacing the term “relief valve” and “valve” with “pressure relief device” and “device” in the force majeure event definition in §§63.641 and 63.670(o)(1)(ii)(B), respectively. We received a comment that the term “valve” should be replaced with the term “device” in §63.670(o)(1)(vi) for consistency and are finalizing this change;
4. Expanding the list of exceptions for equipment leak requirements in §63.648(a) to ensure that the intent of the rulemaking is clear, that pressure relief devices subject to the requirements in either 40 CFR part 60, subpart VV or part 63, subpart H and the requirements in 40 CFR part 63, subpart CC are to comply with the requirements in §63.648(j)(1) and (2), instead of the pressure relief device requirements in 40 CFR part 60, subpart VV and 40 CFR part 63, subpart H;
5. Editing the reporting and recordkeeping requirements related to fenceline monitoring contained in §63.655(h)(8) to provide clarity that compliance reports are due 45 days after the end of each reporting period. The term “periodic” in the context of the report for fenceline monitoring has been removed to avoid confusion concerning the due dates of other periodic reports contained in 40 CFR part 63, subpart

CC such as those specified in §63.655(g);

6. Editing the siting requirements for passive monitors near known sources of volatile organic compounds (VOC) contained in §63.658(c)(1) to clarify that a monitor should be placed on the shoreline adjacent to the dock for marine vessel loading operations by removing the phrase "that are located offshore";
7. Revising the catalytic reforming unit (CRU) pressure limit exclusion provision in 40 CFR 63.1566(a)(4) to specify that refiners have 3 years to comply with the requirements to meet emission limitations in Tables 15 and 16 if they actively purge or depressurize at vessel pressures of 5 pounds per square inch gage (psig) or less;
8. Revising the entry for item 1 in Table 2 of 40 CFR part 63, subpart UUU to clarify that refineries have 18 months to comply with the 20-percent opacity operating limit for units subject to Refinery NSPS subpart J or units electing to comply with Refinery NSPS subpart J provisions;
9. Removing the reference to §60.102a(b)(1) in §63.1564(a)(1)(iv). Additionally, in response to a comment, we are removing the phrase "of this Chapter" from this same provision for consistency.
10. Making a typographical correction to the reference to §63.1566(a)(5)(iii) in 40 CFR part 63, subpart UUU, Table

3, Item 12 to correctly reference §63.1564(a)(5)(ii); and  
11. Making an editorial correction to add the word "and" in  
place of a semicolon in 40 CFR part 63, subpart UUU, Table  
5, Item 2.

In reviewing the rule requirements, we noted that the last sentence of the introductory paragraph in §63.1564(a)(1) refers to "...the four options in paragraphs (a)(1)(i) through (vi) of this section." There are six options in these paragraphs, and thus we are finalizing an amendment to revise §63.1564(a)(1) to accurately describe these paragraphs by replacing the word "four" with "six."

As discussed in more detail in Section IV of this preamble, in response to a comment, we are finalizing an amendment to item (5) in the definition of miscellaneous process vent to clarify that in situ sampling systems will be excluded from the definition until February 1, 2016. After this date, these sampling systems will be considered miscellaneous process vents. Systems which are determined to be Group 1 miscellaneous process vents will need to comply with applicable provisions no later January 30, 2019.

#### **IV. Summary of Comments and Responses**

This section summarizes substantive comments received on the February 2016 proposal. We received some comments suggesting rule revisions for requirements in the December 2015 rule for



which we did not propose a revision in the February 2016 proposal. These comments were not specifically summarized or addressed because they are beyond the scope of the amendments and we did not open those provisions for public comment. The Agency may elect to consider the issues raised by those comments in the context of a future rulemaking action.

#### A. Compliance Date Amendments

Comment 1: Two commenters expressed support for the proposal to revise the compliance dates for the maintenance vent provisions during periods of startup, shutdown, maintenance and inspection in 40 CFR part 63, subpart CC, for the alternative standards for startup, shutdown and hot standby for FCCU in 40 CFR part 63, subpart UUU and the alternative standards for startup and shutdown for SRU in subpart UUU. These commenters agreed that additional time is needed to install controls and/or comply with management of change requirements in applicable process safety management (PSM) and risk management program (RMP) requirements. Commenters asserted that refineries need this time to fully perform applicability determinations, complete the procurement process to acquire consultant services to assist with these applicability determinations, modify internal procedures, perform training and implement control/equipment/operational changes as needed.

One commenter further explained that they also interpreted

statements in the December 1, 2015, preamble to the final rule (80 FR at 75186) as EPA's intent to provide 18 months for compliance with the provisions in §§ 63.1564 and 63.1565 including the associated monitoring, recordkeeping and reporting requirements. The commenter points out that the regulatory provisions in 63.1564 (a) (2) and in Table 2 of Subpart UUU do not reflect this intent and that these provisions should be revised to reflect an August 1, 2017, compliance date. The commenter specifically requested that EPA clarify the regulatory language to provide an August 2017 compliance date for monitoring requirements for FCCU controls, such as bag leak detectors, total power and the secondary current operating limits for electrostatic precipitators (ESP), and daily checks of the air or water pressure to the spray nozzles on jet ejector-type wet scrubbers or other types of wet scrubbers equipped with atomizing spray nozzles.

The commenter further explained that pursuant to §63.1572(c) (1)-(5), the compliance time for continuous parameter monitoring systems (CPMS) specifications in Table 41, when coupled with the revisions to monitoring requirements contained in §63.1572(d), is inadequate (the commenter believes these requirements are effective within 60 days of the effective date of the Refinery Sector Rule) given that refineries would have to perform an assessment of each CPMS as well an assessment of

potential equipment and operational changes.

Response 1: We appreciate the support for the proposed revisions. We disagree, however, with the comment indicating a belief that we also intended to provide 18 months for refineries to comply with the FCCU provisions in §§ 63.1564 and 63.1565, including the associated monitoring, recordkeeping and reporting requirements.

Sections 63.1564 and 63.1565 refer to NSPS Ja requirements, which are not new requirements for some sources pursuant to the December 2015 final amendments. In the preamble to the December 2015 final amendments, we stated (80 FR 75186): "As proposed, we are providing 18 months after the effective date of the final rule to conduct required performance tests and comply with any **revised** [emphasis added] operating limits for FCCU." We did not consider the pre-existing NSPS requirements referred to in §§63.1564 and 63.1565 to be "revised operating limits" for sources subject to NSPS Ja. We note that an 18-month compliance period for these NSPS Ja requirements is not supported because the proposed and final MACT operating limits are identical to the NSPS Ja operating limits which already apply to these affected sources. For refinery sources subject to the December 2015 final amendments and that are non-NSPS Ja sources, Tables 1 through 14 to 40 CFR part 63, subpart UUU clearly provide an 18-month compliance period for refineries to transition from the

existing requirements to the revised operating limits.

With regard to the revised FCCU monitoring requirements in §63.1572(d), as discussed in the Response to Comment document for the December 1, 2015, final rule (Docket Item No. EPA-HQ-OAR-2010-0682-0802), we amended the alternative monitoring approach to require daily inspections of the air or water supply lines with the understanding that no new monitoring equipment is needed to complete these inspections. Therefore, we proposed and then finalized these alternative requirements to apply immediately on the effective date of the rule.

With regard to the compliance time for CPMS, the commenter is mistaken that the regulations provide a 60-day compliance period. Section §63.1572(c)(1) provides an 18-month transition period to the new CPMS quality assurance (QA) requirements in Table 41. When establishing this compliance date, we estimated that the time to perform these evaluations, request vendor quotes, if necessary to upgrade or replace existing monitors, and install the new/upgraded equipment would require about 12 to 18 months. Thus, in the promulgating the final rule, the Agency considered the types of concerns raised by the commenter and provided an 18-month transition period.

We note that pursuant to the provisions in §63.6(i), which are generally applicable, refinery owners or operators may seek compliance extensions on a case-by-case basis if necessary.

Comment 2: One commenter stated that by extending the compliance dates for the provisions addressed in the proposal, the EPA has extended the amount of time for illegal exemptions for periods of startup, shutdown and malfunction. The commenter also asserted that substituting the general duty requirements as the continuous emissions limit during the period between the promulgation and effective date is not consistent with the CAA as it requires that section 112 standards apply at all times, and general duty requirements do not meet the requirements of CAA section 112.

The commenter also maintained that the CAA requires that air toxics standards should be effective upon promulgation, and provides that existing sources should comply as expeditiously as practicable. The commenter argued that the EPA has not demonstrated in the record how 18 months is as "expeditiously as practicable," and therefore the extension of the compliance period is arbitrary and unlawful. The commenter continued that the reasons given for the extension were in part based on a potential need to install controls, but the EPA did not provide an independent analysis demonstrating that there is an actual need for new controls. Further, the commenter asserted that this scenario could be addressed on a case-by-case basis by the provisions in §63.6(i) rather than as a blanket exemption for all sources. The commenter also stated that the other reason

given for the extension, compliance with the RMP and the Occupational Safety and Health Administration's (OSHA) PSM, does not justify an extension for compliance with the air toxics program. The commenter also stated that the timing for removing these SSM exemptions has been delayed for approximately 8 years (since the 2008 *Sierra Club* ruling) due to rulemaking processes and delays, and that further delay is unwarranted.

Finally, the commenter stated that the EPA did not provide emissions data to support their statements in the preamble that the emission impacts from extending the compliance deadlines will have "an insignificant effect on emissions reductions."

Response 2: We share the commenter's desire to implement the new Refinery Sector Rule provisions as quickly as possible. However, we have determined that it is infeasible to immediately comply with certain provisions of the December 1, 2015, final rule, and it is, therefore, necessary to provide the additional compliance time. Based on the information that we now have, we concluded that facilities require additional time to comply with certain provisions in the final rule in order to allow facilities to install the appropriate monitoring equipment, change procedures, and, if necessary, add or modify emission control equipment.

We disagree with the commenters that we substituted the general duty requirement for the requirements for which we are

establishing an 18-month compliance period. Rather, we discussed the general duty provision to emphasize that although compliance with the relevant amendments would be delayed for a period of time, these sources remain obligated to comply with good air pollution control practices as specified in the general duty requirements. We were not suggesting that the "general duty" requirement is sufficient to meet CAA section 112 for the regulated sources at issue in this rule.

We disagree with the commenter that the compliance period is not supported and is therefore arbitrary. The process equipment associated with maintenance vents, FCCU and SRU, are subject to the requirements of the RMP regulation in 40 CFR part 68 and the OSHA PSM standard in 29 CFR part 1910. Therefore, any operational or procedural changes resulting from meeting the applicable standards must follow the management of change procedures in the respective regulatory programs, as codified in §68.75 and §1910.119(l). As part of the management of change process, the EPA expects that facilities will have to perform an upfront assessment to determine what changes are required to meet the maintenance vent requirements and alternative standards for FCCU and SRU during periods of startup and shutdown. Based on the new information we received after these regulatory requirements were promulgated, we anticipate that refinery owners or operators will have to adjust or install new

instrumentation including alarms, closed drain headers, equipment blowdown drums, and other new or revised equipment and controls in order to comply with the new startup and shutdown provisions. Where these types of projects are necessary, it is likely facilities will have to hire a contractor to assist with the project and complete the procurement process. Additionally, we expect that facilities will have to perform risk assessments and review and revise standard operating procedures, as necessary. Further, the management of change provisions also require that employees who are involved in operating a process, and maintenance and contract employees whose job tasks are affected by the change, must be trained prior to start up of the affected process. Finally, facilities are required to conduct pre-startup safety reviews and obtain authorization to fully implement and startup the modified process and/or equipment.

We disagree that compliance obligations with EPA's RMP and OSHA's PSM cannot be considered in determining the appropriate compliance period to the extent those obligations can be met consistent with the compliance period mandated by CAA section 112. In the present case, the compliance period of 18 months is well within the maximum 3-year compliance period allowed by CAA section 112(i). When considering an appropriate compliance timeframe, it is important to consider the time it takes to safely transition to new operating procedures. If an explosion



or fire occurs due to inadequate planning and evaluation of new procedures, the amount of toxics released to the atmosphere could dwarf the emission reductions anticipated from the new startup and shutdown requirements. Such an event could cause harm to refinery personnel and unnecessarily expose the neighboring community to releases of toxic emissions. Therefore, we believe it is reasonable to consider other applicable regulatory compliance obligations for these programs when establishing compliance dates for CAA section 112 requirements.

While we understand the commenter's concerns that the regulatory changes did not occur as quickly as they would have hoped, we cannot ignore feasibility and compliance with health and safety requirements, as discussed above, in determining an appropriate compliance timeframe. The "delay" in establishing these requirements does not somehow make it technically feasible to immediately comply with these new standards. Even with the 18-month timeframe being finalized today, sources must still begin the planning and evaluation process immediately to meet the compliance date.

We agree with the commenters that another statutory mechanism for addressing compliance issues such as the ones addressed here would be to rely on facility-specific requests pursuant to §63.6(i). However, when a significant number of extension requests are anticipated, we consider it reasonable

and more efficient to provide the additional compliance time within the rule. Providing the compliance time in the rule reduces both industry and Agency burden associated with developing and evaluating waivers on a case-by-case basis. It also reduces the uncertainty that facilities face when a regulatory compliance date is approaching and a request for an extension has not yet been addressed by the Agency. Moreover, in the current case, the compliance period established in the December 1, 2015 rule was only a few months after the publication of the rule and that time period was generally not sufficient for a case-by-case extension process.

We believe that the later compliance date will have an insignificant effect on a refinery's overall emissions. The maintenance vent provisions apply only to vent emissions associated with taking equipment out of service for maintenance or repair. While there may be a number of pieces of equipment taken out of service over a given year, many facility owners or operators already have standard procedures for de-inventorying equipment. While these procedures may not specifically meet the final rule requirements (for example, they may depressure to atmosphere once the vessel is below 5 psig, but may not measure the lower explosive limit even though it could be monitored), the general equipment de-inventory procedures will typically limit emissions to the atmosphere. For the startup and shutdown

operating limit alternatives for FCCU and SRU, these equipment may be shut down only once every 2 to 5 years. Therefore, we expect very few of these events to occur during the revised compliance period so there are limited opportunities for these emissions and limited opportunities for emissions reductions. We note that when we finalized the FCCU requirements, we did not project any emissions reductions associated with these requirements. This is partly due to the limited frequency of occurrence and partly due to uncertainties in the existing practices used by facilities to reduce these emissions. While we developed these requirements to ensure these sources had emission limitations that applied at all times, the decision was not based on a quantitative estimate of the emission reduction that would be achieved by these requirements. In general, we believe the emissions from these emission points to be relatively small compared to the refinery's total HAP emissions so that the emissions reduction achieved by the new requirements would be small. Therefore, we expect that the modification to the compliance dates in this final rule will not significantly impact a refinery's emissions.

Comment 3: One commenter stated that the references in the proposed rule to the procedures for requesting compliance extensions through §63.6(i) are problematic for state regulators and industry. Facilities that have to install new controls or

otherwise invest in capital projects in order to comply with the new maintenance vent requirements or alternative standards for FCCU and SRU may not have ample time to submit such requests. Instead of requiring compliance by August 2017, the commenter suggested that the EPA finalize a compliance date 6 months after promulgation of the final rule. This would allow sources an opportunity to use the provisions in §63.6(i) as determined appropriate on a case-by-case basis by the delegated authority. Finally, the commenter suggested that, in the future, the EPA should promulgate standards with compliance dates at least 120 days after promulgation and that the EPA should issue a stay of the requirements if similar situations requiring compliance date extensions should arise.

Response 3: As explained in the previous response, a compliance date of August 1, 2017, is consistent with CAA section 112(i)(3). And, because numerous facilities will likely need additional time beyond the current compliance date, it is reasonable to rely on that provision instead of setting a shorter compliance period and relying on the case-by-case extension provisions of CAA section 112 and §63.6(i). Furthermore, for the reasons provided in the previous response, we do not believe that a 6-month compliance period as requested by this commenter reflects the actual time it will take for most facilities to comply with these provisions. The request that we

provide a minimum of 120 days for compliance in future rulemakings goes beyond the scope of this rulemaking. Compliance periods for future regulations will be addressed in the context of the relevant proposed and final rules.

Comment 4: One commenter requested that an 18-month extension to the compliance date be provided to allow for compliance with the general duty requirements for maintenance vents. The commenter stated that prior to the December 1, 2015 final amendments, designated maintenance vents were not considered "affected facilities," and, therefore, were not subject to the general duty provisions. The commenter argued that facilities will need to perform applicability determinations for vents on refinery processes, update procedures, perform training, and go through the OSHA management of change process to assess the implications of the general duty clause on applicable vents, and thus sources need time to do so.

Response 4: We did not propose any change to the general duty requirement for "maintenance vents." Rather, we proposed a revision to the compliance date for startup, shutdown, maintenance and inspection for maintenance vents. Although we noted that the general duty provision applies prior to the proposed revised compliance date, we did not propose to modify the compliance obligation for meeting the general duty requirement. Therefore, we believe that this comment goes beyond

the scope of this rulemaking. However, we note that we consider it standard practice for any operating facility to use good air pollution control practices regardless of the emission source and whether or not that source is specifically regulated by the MACT standard; thus, additional time to meet such a requirement would not be warranted.

Comment 5: One commenter stated that the EPA should extend the compliance dates for the monitoring requirements for bypass lines of miscellaneous process vents in §63.644(c). The commenter asserted that the February 1, 2016 API/AFPM supplemental petition provides a list of reasons why such an extension is needed and that EPA could rely on the same justification as that for the compliance date extension being granted for the startup, shutdown, maintenance and inspection requirements for maintenance vents in §63.643(c). The commenter noted that the API/AFPM petition explains that items previously excluded from the monitoring requirements in §63.644(c), such as high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves are no longer excluded under the December 2015 final rule, and, thus, would now be required to install flow indicators or employ car-seal or lock-and-key type valves. The API/AFPM petition also explains that since onstream analyzer vents (in situ sampling systems) are excluded from the definition of miscellaneous process vents through January 30,

2019, but not specifically excluded from the bypass line monitoring provisions, some local agencies may interpret that the bypass line provisions apply to analyzer vents and would require analyzer vents to be in compliance during the additional period between the February 1, 2016, effective date of the rule and January 30, 2019.

Response 5: As part of the December 1, 2015, final rule, the EPA removed provisions from §63.644(c) that excluded high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves from the bypass line provisions in §63.644(c) (1) and (2). Low leg drains and equipment subject to §63.648 continue to be excluded from the bypass line provisions in §63.644(c). Because open-ended valves or lines and pressure relief valves (devices) are equipment subject to §63.648, they remain subject to the bypass line exclusion. In addition, high point bleeds are open-ended valves or lines and would also be equipment subject to §63.648, and thus, subject to the bypass line exclusion.

We removed analyzer vents from the list of items excluded from the bypass line provisions because we consider analyzer vents to be miscellaneous process vents consistent with our amendments to item (5) in the list of exclusions from the definition of miscellaneous process vents in §63.641. We recognize that based on the wording of item (5), some may

interpret that, prior to January 30, 2019, these analyzer vents could be construed to be bypass lines. This is not our intent. We consider analyzer vents to be miscellaneous process vents as they routinely or continuously vent gases to the atmosphere. We included the January 30, 2019, date to establish the date at which these analyzer vents must comply with the miscellaneous process vent standards.

It was not our intent that analyzer vents would be considered bypass lines between the February 1, 2016, effective date of the rule and the January 30, 2019, compliance date provided in item (5) of the list of exclusions from the definition of miscellaneous process vents. While we consider it unlikely that local agencies would interpret the Refinery final amendments to require bypass line monitoring for analyzer vents, we understand the commenter's concern. To clarify these requirements consistent with our original intent, we are amending item (5) in the definition of miscellaneous process vent to exclude "In situ sampling systems (onstream analyzers)" until February 1, 2016. After this date, these sampling systems will be included in the definition of miscellaneous process vents and sampling systems determined to be Group 1 miscellaneous process vents must comply with the requirements in §§63.643 and 63.644 no later than January 30, 2019.

Comment 6: One commenter requested that EPA provide an 18-



month compliance period, rather than the 150 days provided, for existing storage tanks to transition from complying with the requirements in §63.646 to the storage vessel requirements in §63.660, which were established in the December 2015 final rule. The storage vessel provisions in §63.660 require that new or existing Group 1 storage vessels comply with the requirements in subpart WW or subpart SS of 40 CFR part 63. The commenter stated that sources will need time to assess whether their existing storage tanks meet the "Group 1 Storage Tank" definition finalized in §63.641 as part of the RTR rulemaking, and, if so, to assess whether existing controls will need to be updated to meet the subpart WW requirements contained in §63.660. Should such control upgrades be required, the commenter asserted that additional time will be needed to design and install the equipment, complete management of change process and provide operator training. The commenter also stated that subpart WW imposes additional inspection and recordkeeping requirements which will require additional time for further operator training. A second commenter provided similar comments, stating that inadequate time had been given to assess applicability and upgrade tank controls (if needed) for existing Group 1 storage vessels. Finally, a comment was received stating that Table 11 appears to require compliance with §63.660 and is in conflict with the overlap provisions in §63.640(n). The overlap

provisions in §63.640(n) allow Group 1 and 2 storage vessels to comply with other regulations (e.g., 40 CFR part 60, subpart Kb) as a means of demonstrating compliance with the standards in Refinery MACT 1. Compliance with the overlap provisions is made in lieu of complying with the storage vessel provisions in §63.660 of Refinery MACT 1.

Response 6: While Table 11 was completely re-printed in the proposed amendments, we did not propose to revise the compliance dates for storage vessels or to address storage vessels in any way as part of the proposed rule; thus, this comment is considered out of scope. We note that this small population of tanks was specifically provided additional time to install the required controls as specified in §63.660(d) and the commenters did not provide specific information on why additional time is required. Section 63.6(i) provides a mechanism to request additional time for the limited number of tanks within this small population of tanks that may need additional time.

With respect to the comment that subpart WW imposes additional inspection and recordkeeping requirements, the required inspections are infrequent (generally once a year to once every 5 or 10 years) and we disagree that existing compliance provisions do not provide sufficient time for owners or operators to “upgrade,” if necessary, their inspection procedures.

We agree with the commenter that Table 11 does appear to require all storage vessels to transition to comply with §63.660 in conflict with the overlap provisions in §63.640(n), which allow compliance with 40 CFR part 60, subpart Kb as a means to comply with the amended Refinery MACT 1 storage vessel requirements. Therefore, we are revising the relevant language in Table 11 to clarify that owners or operators of affected storage vessels must transition to comply with the provisions in §63.660 "...or, if applicable, §63.640(n)..." on or before April 29, 2016.

#### B. Technical and Editorial Corrections

Comment 1: One commenter questioned the revisions to Items (4)(i) and (4)(ii) in Table 11 of 40 CFR part 63, subpart CC as they apply to existing sources constructed or reconstructed before July 14, 1994. For such sources, the commenter stated that these revisions appear to retroactively impose compliance dates of August 18, 1998, for paragraphs that were added or amended after August 18, 1998. The commenter provided examples of the references to requirements in §63.648(j)(1) and (2) and §63.644 which should have an effective date of February 1, 2016. The commenter further stated that Table 11 is not all inclusive and omits many compliance dates of sections in subpart CC, including those revised during the amendment process and provided examples. The commenter asserted that these omissions

make the table incomplete and contribute to overall confusion, and, therefore, requested that the table be deleted and compliance dates be incorporated directly into the regulatory text.

Response 1: The commenter is mistaken that §63.648(j)(1) and (2) are new requirements. In the December 2015 final rule, EPA incorporated requirements from 60.482-4 of 40 CFR part 60, subpart VV (which was previously referenced in 63.648 (a) of 40 CFR part 63, subpart CC) directly into §63.648(j)(1) and (2). Section 63.644 was amended and these final revisions provide additional clarification on the compliance date for analyzer vents, as described in Response No. 5. Therefore, Table 11 neither changed the requirement nor changed the applicable compliance date.

Table 11 is not intended to reflect every requirement and compliance date. Rather, for requirements not identified in Table 11, as in those cited by the commenter, the compliance date is the effective date of the rule, February 1, 2016, or is specified in the appropriate section.

Comment 2: One commenter requested that the use of the term "pressure relief device" or "device" be used in §63.670(o)(1)(vi), similar to the edits proposed in §63.641 and §63.670(o)(1)(ii)(B). The commenter also requested that the EPA provide a definition of the term "pressure relief device" in

§63.641.

Response 2: We agree that §63.670(o)(1)(vi) should use the term “pressure relief device” consistent with the edits proposed to §63.641 and §63.670(o)(1)(ii)(B), and we are amending this paragraph as suggested.

The request that EPA add a definition of “pressure relief device” is outside the scope of the current rulemaking.

Comment 3: One commenter requested that the proposed revision to §63.1564(a)(1)(iv) also remove the words “of this chapter” for consistency with other options referencing subpart UUU alternatives.

Response 3: We agree with the commenter that the phrase “of this chapter” should be removed. This referred to the reference to §60.102a(b)(1), which we proposed to remove and are removing in this final rule. In reviewing this comment, we also noted that the last sentence of the introductory paragraph in §63.1564(a)(1) refers to “...the four options in paragraphs (a)(1)(i) through (vi) of this section.” To address this clerical error, we are also revising the last sentence in §63.1564(a)(1) to replace the word “four” with the word “six.”

## **V. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at <http://www2.epa.gov/laws-regulations//laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and  
Executive Order 13563: Improving Regulation and Regulatory  
Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations at 40 CFR part 63, subparts CC and UUU and has assigned OMB control numbers 2060-0340 and 2060-0554. The finalized amendments are revisions to compliance dates, clarifications, and technical corrections that do not affect the estimated burden of the existing rule. Therefore, we have not revised the information collection request for the existing rule.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the

rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. The action consists of revisions to compliance dates, clarifications, and technical corrections which do not change the expected economic impact analysis performed for the existing rule. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. It will not have substantial direct

effect on tribal governments, on the relationship between the federal government and Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The final amendments serve to revise compliance dates and make technical clarifications and corrections. We expect the additional compliance time will have an insignificant effect on emission reductions as many refiners already have measures in place due to state and other federal requirements to minimize emissions during these periods. Further, these periods are relatively infrequent and are usually of short duration. Therefore, these amendments should not appreciably increase risk for any populations. Further, this action will allow more time for refiners to implement procedures to safely start up and shut down equipment which should minimize safety risks for all populations.

H. Executive Order 13211: Actions Concerning Regulations That



Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does **not** have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The finalized amendments serve to revise compliance dates and make technical clarifications and corrections. We expect the additional compliance time will have an insignificant effect on emission reductions as many refiners already have measures in place due to state and other federal requirements to minimize emissions during these periods. Further, these periods are relatively infrequent and are usually of short duration. Therefore, the finalized amendments should not appreciably increase risk for any populations. Further, this action will allow more time for refiners to implement procedures to safely start up and shut

down equipment which should minimize safety risks for all populations.

K. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of Congress and to the Comptroller General of the United States. This is not a "major rule" as defined by 5 U.S.C. 804(2).

**National Emission Standards for Hazardous Air Pollutant  
Emissions: Petroleum Refinery Sector Amendments**

Page 43 of 60

**List of Subjects**

40 CFR Part 60

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: July 1, 2016.

Gina McCarthy,  
Administrator.

For the reasons set forth in the preamble, EPA amends 40 CFR parts 60 and 63 as follows:

**PART 60 - STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES**

1. The authority citation for part 60 continues to read as follows:

**Authority:** 42 U.S.C. 7401 et seq.

**Subpart Ja--Standards of Performance for Petroleum Refineries  
for Which Construction, Reconstruction, or Modification  
Commenced After May 14, 2007**

2. Section 60.102a is amended by revising the first sentence of paragraph (f)(1)(i) to read as follows:

**§60.102a Emissions limitations.**

\* \* \* \* \*

(f) \* \* \*

(1) \* \* \*

(i) For a sulfur recovery plant with an oxidation control system or a reduction control system followed by incineration, the owner or operator shall not discharge or cause the discharge of any gases containing SO<sub>2</sub> into the atmosphere in excess of the emission limit calculated using Equation 1 of this section. \* \*

\*

\* \* \* \* \*

**PART 63 - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR  
POLLUTANTS FOR SOURCE CATEGORIES**

3. The authority citation for part 63 continues to read as follows:

**Authority:** 42 U.S.C. 7401 et seq.

**Subpart CC--National Emission Standards for Hazardous Air  
Pollutants From Petroleum Refineries**

4. Section 63.641 is amended by revising the definitions of "Closed blowdown system", "Force majeure event" and paragraph (5) of the definition "Miscellaneous process vent" to read as follows:

**§63.641 Definitions.**

\* \* \* \* \*

Closed blowdown system means a system used for depressuring process vessels that is not open to the atmosphere and is configured of piping, ductwork, connections, accumulators/knockout drums, and, if necessary, flow inducing devices that transport gas or vapor from a process vessel to a control device or back into the process.

\* \* \* \* \*

Force majeure event means a release of HAP, either directly to the atmosphere from a pressure relief device or discharged via a flare, that is demonstrated to the satisfaction of the Administrator to result from an event beyond the refinery owner or operator's control, such as natural disasters; acts of war or

terrorism; loss of a utility external to the refinery (e.g., external power curtailment), excluding power curtailment due to an interruptible service agreement; and fire or explosion originating at a near or adjoining facility outside of the refinery that impacts the refinery's ability to operate.

\* \* \* \* \*

Miscellaneous process vent \* \* \*

(5) In situ sampling systems (onstream analyzers) until February 1, 2016. After this date, these sampling systems will be included in the definition of miscellaneous process vents and sampling systems determined to be Group 1 miscellaneous process vents must comply with the requirements in §§63.643 and 63.644 no later than January 30, 2019;

\* \* \* \* \*

5. Section 63.643 is amended by revising paragraph (c) introductory text and adding paragraph (d) to read as follows:

**§63.643 Miscellaneous process vent provisions.**

\* \* \* \* \*

(c) An owner or operator may designate a process vent as a maintenance vent if the vent is only used as a result of startup, shutdown, maintenance, or inspection of equipment where equipment is emptied, depressurized, degassed or placed into service. The owner or operator does not need to designate a maintenance vent as a Group 1 or Group 2 miscellaneous process

vent. The owner of operator must comply with the applicable requirements in paragraphs (c)(1) through (3) of this section for each maintenance vent according to the compliance dates specified in table 11 of this subpart, unless an extension is requested in accordance with the provisions in §63.6(i).

\* \* \* \* \*

(d) After February 1, 2016 and prior to the date of compliance with the maintenance vent provisions in paragraph (c) of this section, the owner or operator must comply with the requirements in §63.642(n) for each maintenance venting event and maintain records necessary to demonstrate compliance with the requirements in §63.642(n) including, if appropriate, records of existing standard site procedures used to deinventory equipment for safety purposes.

6. Section 63.648 is amended by revising paragraph (a) introductory text as follows:

**§63.648 Equipment leak standards.**

(a) Each owner or operator of an existing source subject to the provisions of this subpart shall comply with the provisions of 40 CFR part 60, subpart VV, and paragraph (b) of this section except as provided in paragraphs (a)(1) and (2), (c) through (i), and (j)(1) and (2) of this section. Each owner or operator of a new source subject to the provisions of this subpart shall

comply with subpart H of this part except as provided in paragraphs (c) through (i) and (j) (1) and (2) of this section.

\* \* \* \* \*

7. Section 63.655 is amended by revising paragraph (h) (8) introductory text to read as follows:

**§63.655 Reporting and recordkeeping requirements.**

\* \* \* \* \*

(h) \* \* \*

(8) For fenceline monitoring systems subject to §63.658, within 45 calendar days after the end of each reporting period, each owner or operator shall submit the following information to the EPA's Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The owner or operator need not transmit these data prior to obtaining 12 months of data.

\* \* \* \* \*

8. Section 63.658 is amended by revising paragraph (c) (1) to read as follows:

**§63.658 Fenceline monitoring provisions.**

\* \* \* \* \*

(c) \* \* \*

(1) As it pertains to this subpart, known sources of VOCs, as used in Section 8.2.1.3 in Method 325A of appendix A of this



part for siting passive monitors, means a wastewater treatment unit, process unit, or any emission source requiring control according to the requirements of this subpart, including marine vessel loading operations. For marine vessel loading operations, one passive monitor should be sited on the shoreline adjacent to the dock.

\* \* \* \* \*

9. Section 63.670 is amended by revising paragraphs (o)(1)(ii)(B) and (o)(1)(vi) to read as follows:

**§63.670 Requirements for flare control devices.**

\* \* \* \* \*

(o) \* \* \*

(1) \* \* \*

(ii) \* \* \*

(B) Implementation of prevention measures listed for pressure relief devices in §63.648(j)(5) for each pressure relief device that can discharge to the flare.

\* \* \*

(vi) For each pressure relief device vented to the flare identified in paragraph (o)(1)(iv) of this section, provide a detailed description of each pressure release device, including type of relief device (rupture disc, valve type) diameter of the relief device opening, set pressure of the relief device and listing of the prevention measures implemented. This information

may be maintained in an electronic database on-site and does not need to be submitted as part of the flare management plan unless requested to do so by the Administrator.

\* \* \* \* \*

10. The appendix to subpart CC is amended by revising table 11 to read as follows:

**Appendix to Subpart CC of Part 63—Tables**

\* \* \* \* \*

**Table 11—Compliance Dates and Requirements**

<b>If the construction/reconstruction date is...</b>	<b>Then the owner or operator must comply with...</b>	<b>And the owner or operator must achieve compliance...</b>	<b>Except as provided in...</b>
(1) After June 30, 2014	(i) Requirements for new sources in §§63.643(a) and (b); 63.644, 63.645, and 63.647; 63.648(a) through (i) and (j)(1) and (2); 63.649 through 63.651; and 63.654 through 63.656	Upon initial startup	§63.640(k), (l) and (m).
	(ii) Requirements for new sources in §§63.642 (n), 63.643(c), 63.648(j)(3), (6) and (7); and 63.657 through 63.660	Upon initial startup or February 1, 2016, whichever is later	§63.640(k), (l) and (m).
(2) After September 4, 2007 but on or before June 30, 2014	(i) Requirements for new sources in §§63.643(a) and (b); 63.644, 63.645, and 63.647; 63.648(a) through (i) and (j)(1) and (2); and 63.649 through 63.651, 63.655 and 63.656	Upon initial startup	§63.640(k), (l) and (m).

If the construction/reconstruction date is...	Then the owner or operator must comply with...	And the owner or operator must achieve compliance...	Except as provided in...
	(ii) Requirements for new sources in §63.654	Upon initial startup or October 28, 2009, whichever is later	§63.640(k), (l) and (m).
	(iii) Requirements for new sources in either §63.646 or §63.660 or, if applicable, §63.640(n)	Upon initial startup, but you must transition to comply with only the requirements in §63.660 or, if applicable, §63.640(n) on or before April 29, 2016	§§63.640(k), (l) and (m) and 63.660(d).
	(iv) Requirements for existing sources in §63.643(c)	On or before August 1, 2017	§§63.640(k), (l) and (m) and 63.643(d).
	(v) Requirements for existing sources in §63.658	On or before January 30, 2018	§63.640(k), (l) and (m).
	(vi) Requirements for existing sources in §63.648 (j) (3), (6) and (7) and §63.657	On or before January 30, 2019	§63.640(k), (l) and (m).
	(vii) Requirements in §63.642 (n)	Upon initial startup or February 1, 2016, whichever is later	
(3) After July 14, 1994 but on or before September 4, 2007	(i) Requirements for new sources in §§63.643(a) and (b); 63.644, 63.645, and 63.647; 63.648(a) through (i) and (j) (1) and (2); and 63.649 through 63.651, 63.655 and 63.656	Upon initial startup or August 18, 1995, whichever is later	§63.640(k), (l) and (m).
	(ii) Requirements for existing sources in §63.654	On or before October 29, 2012	§63.640(k), (l) and (m).

If the construction/reconstruction date is...	Then the owner or operator must comply with...	And the owner or operator must achieve compliance...	Except as provided in...
	(iii) Requirements for new sources in either §63.646 or §63.660 or, if applicable, §63.640(n)	Upon initial startup, but you must transition to comply with only the requirements in §63.660 or, if applicable, §63.640(n) on or before April 29, 2016	§§63.640(k), (l) and (m) and 63.660(d).
	(iv) Requirements for existing sources in §63.643(c)	On or before August 1, 2017	§§63.640(k), (l) and (m) and 63.643(d).
	(v) Requirements for existing sources in §63.658	On or before January 30, 2018	§63.640(k), (l) and (m).
	(vi) Requirements for existing sources in §§63.648(j)(3), (6) and (7) and 63.657	On or before January 30, 2019	§63.640(k), (l) and (m).
	(vii) Requirements in §63.642(n)	Upon initial startup or February 1, 2016, whichever is later	
(4) On or before July 14, 1994	(i) Requirements for existing sources in §§63.648(a) through (i) and (j)(1) and (2); and 63.649, 63.655 and 63.656	(A) On or before August 18, 1998	(1) §63.640(k), (l) and (m). (2) §63.6(c)(5) or unless an extension has been granted by the Administrator as provided in §63.6(i).
	(ii) Either the requirements for existing sources in §§63.643(a) and (b); 63.644, 63.645, 63.647, 63.650 and 63.651; and item (4)(v) of this table OR The requirements in §§63.652 and 63.653	(A) On or before August 18, 1998	(1) §63.640(k), (l) and (m). (2) §63.6(c)(5) or unless an extension has been granted by the Administrator as provided in §63.6(i).

If the construction/reconstruction date is...	Then the owner or operator must comply with...	And the owner or operator must achieve compliance...	Except as provided in...
	(iii) Requirements for existing sources in either §63.646 or §63.660 or, if applicable, §63.640(n)	On or before August 18, 1998, but you must transition to comply with only the requirements in §63.660 or, if applicable, §63.640(n) on or before April 29, 2016	§§63.640(k), (l) and (m) and 63.660(d).
	(iv) Requirements for existing sources in §63.654	On or before October 29, 2012	§63.640(k), (l) and (m).
	(v) Requirements for existing sources in §63.643(c)	On or before August 1, 2017	§§63.640(k), (l) and (m) and 63.643(d).
	(vi) Requirements for existing sources in §63.658	On or before January 30, 2018	§63.640(k), (l) and (m).
	(vii) Requirements for existing sources in §§63.648(j)(3), (6) and (7) and 63.657	On or before January 30, 2019	§63.640(k), (l) and (m).
	(viii) Requirements in §63.642 (n)	Upon initial startup or February 1, 2016, whichever is later	

\* \* \* \* \*

### **Subpart UUU--National Emission Standards for Hazardous Air**

#### **Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units**

11. Section 63.1563 is amended by:

- a. Revising paragraphs (a)(1) and (2) and (b);
- b. Redesignating paragraphs (d) and (e) as paragraphs (e) and (f), respectively;
- c. Adding new paragraph (d); and

d. Revising newly redesignated paragraph (e) introductory text.

The revisions and additions to read as follows:

**§63.1563 When do I have to comply with this subpart?**

(a) \* \* \*

(1) If you startup your affected source before April 11, 2002, then you must comply with the emission limitations and work practice standards for new and reconstructed sources in this subpart no later than April 11, 2002 except as provided in paragraph (d) of this section.

(2) If you startup your affected source after April 11, 2002, you must comply with the emission limitations and work practice standards for new and reconstructed sources in this subpart upon startup of your affected source except as provided in paragraph (d) of this section.

(b) If you have an existing affected source, you must comply with the emission limitations and work practice standards for existing affected sources in this subpart by no later than April 11, 2005 except as specified in paragraphs (c) and (d) of this section.

\* \* \* \* \*

(d) You must comply with the applicable requirements in §§63.1564(a)(5), 63.1565(a)(5) and 63.1568(a)(4) as specified in paragraph (d)(1) or (2) of this section, as applicable.

(1) For sources which commenced construction or reconstruction before June 30, 2014, you must comply with the applicable requirements in §§63.1564(a)(5), 63.1565(a)(5) and 63.1568(a)(4) on or before August 1, 2017 unless an extension is requested and approved in accordance with the provisions in §63.6(i). After February 1, 2016 and prior to the date of compliance with the provisions in §§63.1564(a)(5), 63.1565(a)(5) and 63.1568(a)(4), you must comply with the requirements in §63.1570(c) and (d).

(2) For sources which commenced construction or reconstruction on or after June 30, 2014, you must comply with the applicable requirements in §§63.1564(a)(5), 63.1565(a)(5) and 63.1568(a)(4) on or before February 1, 2016 or upon startup, whichever is later.

(e) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the requirements in paragraphs (e)(1) and (2) of this section apply.

\* \* \* \* \*

12. Section 63.1564 is amended by revising paragraphs (a)(1) introductory text, (a)(1)(iv), (a)(5) introductory text and (c)(5) introductory text to read as follows:

**§63.1564 What are my requirements for metal HAP emissions from catalytic cracking units?**

(a) \* \* \*

(1) Except as provided in paragraph (a) (5) of this section, meet each emission limitation in Table 1 of this subpart that applies to you. If your catalytic cracking unit is subject to the NSPS for PM in §60.102 of this chapter or is subject to §60.102a(b) (1) of this chapter, you must meet the emission limitations for NSPS units. If your catalytic cracking unit is not subject to the NSPS for PM, you can choose from the six options in paragraphs (a) (1) (i) through (vi) of this section:

\* \* \* \* \*

(iv) You can elect to comply with the PM per coke burn-off emission limit (Option 2);

\* \* \* \* \*

(5) On or before the date specified in §63.1563(d), you must comply with one of the two options in paragraphs (a) (5) (i) and (ii) of this section during periods of startup, shutdown and hot standby:

\* \* \* \* \*

(c) \* \* \*

(5) If you elect to comply with the alternative limit in paragraph (a) (5) (ii) of this section during periods of startup, shutdown and hot standby, demonstrate continuous compliance on or before the date specified in §63.1563(d) by:

\* \* \* \* \*



13. Section 63.1565 is amended by revising paragraph (a) (5) introductory text to read as follows:

**§63.1565 What are my requirements for organic HAP emissions from catalytic cracking units?**

(a) \* \* \*

(5) On or before the date specified in §63.1563(d), you must comply with one of the two options in paragraphs (a) (5) (i) and (ii) of this section during periods of startup, shutdown and hot standby:

\* \* \* \* \*

14. Section 63.1566 is amended by revising paragraph (a) (4) to read as follows:

**§63.1566 What are my requirements for organic HAP emissions from catalytic reforming units?**

(a) \* \* \*

(4) The emission limitations in Tables 15 and 16 of this subpart do not apply to emissions from process vents during passive depressuring when the reactor vent pressure is 5 pounds per square inch gauge (psig) or less or during active depressuring or purging prior to January 30, 2019, when the reactor vent pressure is 5 psig or less. On and after January 30, 2019, the emission limitations in Tables 15 and 16 of this subpart do apply to emissions from process vents during active purging operations (when nitrogen or other purge gas is actively

introduced to the reactor vessel) or active depressuring (using a vacuum pump, ejector system, or similar device) regardless of the reactor vent pressure.

\* \* \* \* \*

15. Section 63.1568 is amended by revising paragraph (a) (4) introductory text to read as follows:

**§63.1568 What are my requirements for organic HAP emissions from sulfur recovery units?**

(a) \* \* \*

(4) On or before the date specified in §63.1563(d), you must comply with one of the three options in paragraphs (a) (4) (i) through (iii) of this section during periods of startup and shutdown.

\* \* \* \* \*

16. Table 2 to subpart UUU of part 63 is amended by revising the entry for item 1 to read as follows:

**Table 2 to Subpart UUU of Part 63—Operating Limits for Metal HAP Emissions From Catalytic Cracking Units**

\* \* \* \* \*

For each new or existing catalytic cracking unit . . .	For this type of continuous monitoring system . . .	For this type of control device . . .	You shall meet this operating limit . . .
1. Subject to the NSPS for PM in 40 CFR 60.102 and not elect §60.100(e)	Continuous opacity monitoring system	Any	On and after August 1, 2017, maintain the 3-hour rolling average opacity of emissions from your catalyst regenerator vent no higher than 20 percent.
* * * * *			

\* \* \* \* \*

17. Table 3 to subpart UUU of part 63 is amended by  
revising the entry for item 12 to read as follows:

**Table 3 to Subpart UUU of Part 63—Continuous Monitoring Systems  
for Metal HAP Emissions From Catalytic Cracking Units**

\* \* \* \* \*

For each new or existing catalytic cracking unit . . .	If you use this type of control device for your vent . . .	You shall install, operate, and maintain a . . .
* * * * *		
12. Electing to comply with the operating limits in §63.1564(a)(5)(ii) during periods of startup, shutdown, or hot standby.	Any	Continuous parameter monitoring system to measure and record the gas flow rate exiting the catalyst regenerator. <sup>1</sup>

<sup>1</sup>If applicable, you can use the alternative in §63.1573(a)(1)

instead of a continuous parameter monitoring system for gas flow  
rate.

\* \* \* \* \*

18. Table 5 to subpart UUU of part 63 is amended by  
revising the entry for item 2 to read as follows:

**Table 5 to Subpart UUU of Part 63—Initial Compliance With Metal  
HAP Emission Limits for Catalytic Cracking Units**

\* \* \* \* \*

For each new and existing catalytic cracking unit catalyst regenerator vent . . .	For the following emission limit . . .	You have demonstrated initial compliance if . . .
* * * * *		
2. Subject to NSPS for PM in 40 CFR 60.102a(b)(1)(i); or in §60.102 and electing §60.100(e) and electing to meet the PM per coke	PM emissions must not exceed 1.0 g/kg (1.0 lb PM/1,000 lb) of coke burn-off.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM emission rate is less than or equal to 1.0 g/ kg (1.0 lb/1,000

<p>burn-off limit.</p>		<p>lb) of coke burn-off in the catalyst regenerator. As part of the Notification of Compliance Status, you must certify that your vent meets the PM limit. You are not required to do another performance test to demonstrate initial compliance. As part of your Notification of Compliance Status, you certify that your BLD; CO<sub>2</sub>, O<sub>2</sub>, or CO monitor; or continuous opacity monitoring system meets the requirements in §63.1572.</p>
<p>* * * * *</p>		